Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicants/Contact names and addresses:

Donald & Claudia Dennison 520 McGregor Ln Marion, MT 59925-9811

- 2. **Type of action:** Surface Water Application for Beneficial Water Use Permit 76N 30149539
- 3. Water source name: McGregor Creek (McGregor Lake)
- 4. **Location affected by project:** Government Lot 2, E2W2NE Section 16, Township 26N, Range 25W, Flathead County, Montana.

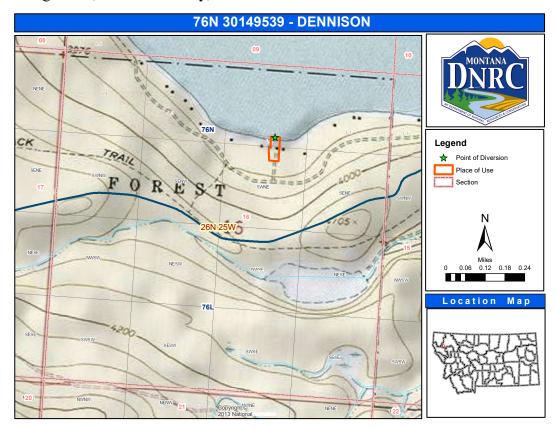


Figure 1. Map of the proposed place of use and point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicants propose to divert water from McGregor Creek (McGregor Lake) (hereafter McGregor Lake) using a pump. The Applicants request a 24.0 GPM flow rate up to an annual volume of 1.67 AF for multiple domestic use (1.02 AF for one single family dwelling and one guest cottage) and lawn and garden irrigation of 0.31 acres (0.65 AF). Multiple domestic use will occur from January 1 – December 31 and lawn and garden irrigation will occur from April 25 – October 5. The point of diversion (POD) is located in Government Lot 2, SENWNE Section 16, Township 26N, Range 25W, Flathead County, Montana. The place of use is located in Government Lot 2, E2W2NE Section 16, Township 26N, Range 25W, Flathead County, Montana (Figure 1). The POD is in the Lower Clark Fork River Basin (76N), in an area not subject to water right basin closures or controlled groundwater area restrictions.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

The Applicant plans to divert water from McGregor Creek (McGregor Lake), which is not on the DFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEO, and whether the proposed project will affect water quality.

According to the MDEQ Clean Water Act Information Center's 2020 Water Quality Information, McGregor Creek, from McGregor Lake to mouth (Thompson River), is classified as "Fully Supporting" for Primary Contact Recreation. It is classified as "Not Fully Supporting" for aquatic life due to Flow Regime Modification (no TMDL applicable), Sedimentation-Siltation (TMDL completed), and Temperature (TMDL completed). It has not been assessed for Drinking Water and Agricultural uses. McGregor Creek's Water Quality Category is "4A" meaning all TMDLs needed to rectify all identified threats or impairments have been completed and approved. The proposed project is not anticipated to affect water quality.

Determination: No significant impact.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: N/A, this project diverts from a surface water source.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The Applicants will divert water from McGregor Lake at a maximum rate of 24.0 GPM. The diversion will use a Goulds J15S jet pump with a NEMA standard single phase 1.5-HP motor and a Well-X-Trol WX-302 pressure tank with a 40/60-pounds per square inch (psi) pressure switch. The water system intake is located on the lakebed and includes a perforated plastic screen and a foot-valve to prevent system backflow and pump prime loss. A 1.25-inch poly suction line will transmit water 171-feet from the lake to the pump and pressure tank in the pump house.

The system will distribute water to household fixtures in the main and guest residences and to two (2) exterior irrigation spigots. Household water will pass through a filtration and disinfection system, while irrigation water will not be treated. The pressure tank with 40/60-psi pressure switch will ensure the system operates at a minimum pressure of 40 psi. The pump will turn on when the system pressure drops to 40 psi and will turn off when the system pressure reaches 60 psi.

The total dynamic head (TDH) of the system at the pressure tank is 121 feet, based on:

- i. The minimum system operating pressure of 40 psi (equivalent to 92-feet of head);
- ii. The 10-foot elevation gain from McGregor Lake's surface to the pressure tank/place of use; and,
- iii. The friction losses in the 171-foot length of 1.25-inch poly transmission line at 24.0 GPM (equivalent to 19-feet of head).

The pump is capable of producing 24.0 GPM at 121-feet TDH based on the applicant-provided system specifications. This flow rate will allow the Applicants to simultaneously supply the multiple domestic uses and the landscaping irrigation system at adequate operating pressures.

The Department finds the system capable of producing and distributing the requested flow rate of 24.0 GPM and annual volume of 1.67 AF.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Flathead Lake, nor will it affect any wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any "species of concern" in Township 26N, Range 25W that could be impacted by the proposed project. 10 animal and zero plant species of concern (Table 1) were identified within the township and range where the project is located. Of these species, the Grizzly Bear (*Ursus arctos*) and the Canada Lynx (*Lynx canadensis*) are listed as threatened by the USFWS. This area is already moderately developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern				
Townsend's Big- eared Bat (Corynorhinus townsendii)	Canada Lynx (<i>Lynx</i> canadensis)	Fisher (Pekania pennanti)	Great Blue Heron (Ardea herodias)	Common Loon (Gavia immer)
Wolverine (Gulo gulo)	Hoary Bat (Lasiurus cinereus)	Grizzly Bear (Ursus arctos)	Northern Goshawk (Accipiter gentilis)	Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi)

Determination: No significant impact.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: N/A, project does not involve wetlands or critical riparian habitats.

<u>**Ponds**</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A, project does not involve ponds.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

It is not anticipated that the proposed multiple domestic use and irrigation of approximately 0.31 acres of lawn and garden will have a negative impact on the soil quality, stability, or moisture content. The soil in the project area is Courville-Winfall complex, 4 to 15 percent slopes, formed from volcanic ash over till derived from quartzite parent material. Courville-Winfall complex, 4 to 15 percent slopes has moderately high to high capacity to transmit water. Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

The home and landscaping has been in place for years and native vegetation has already been disturbed. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

Determination: N/A, project not located on State or Federal Lands.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water, and energy not already addressed.

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

The project is consistent with planned land uses.

Determination: No significant impact.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

HUMAN HEALTH - Assess whether the proposed project impacts human health.

No negative impact on human health is anticipated from this proposed use.

Determination: No significant impact.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

<u>Other Human environmental issues</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.

- (f) <u>Demands for government services</u>? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) <u>Transportation</u>? None identified.
- (j) <u>Safety</u>? None identified.
- (k) Other appropriate social and economic circumstances? None identified.
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. Describe any mitigation/stipulation measures:

None.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from McGregor Lake.

Part III. Conclusion

1. Preferred Alternative

Issue a water use permit if the Applicants prove that the criteria in 85-2-311 MCA are met.

2. Comments and Responses

None.

3. Finding:

Yes No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain \underline{why} the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified. *Name of person(s) responsible for preparation of EA:*

Name: Travis Wilson

Title: Water Resource Specialist

Date: December 21, 2020